Ministry of Municipal Affairs and Housing

Capital Funding Allocation Model for Public Housing

Final Report

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Background

In March, 2000 KPMG LLP ("KPMG") prepared a report for the Ministry of Municipal Affairs and Housing on funding options for Ontario's public housing stock. The final report, titled "Ontario Housing Corporation: Assessment of Capital Funding Models Within the Context of Social Housing Devolution", recommended a going forward capital funding level of $100 million per annum. The report also identified a number of alternatives for distributing capital funding (capital funding allocation models).

Further to the March 2000 Report, KPMG was retained to conduct follow-up investigations. Two questions were to be addressed:

- **What are the reasons for differences in historic levels of capital funding among Service Managers[1]?** The March 2000, KPMG report revealed significant variations in the level of capital funding that have historically been provided to different Local Housing Authorities (now Local Housing Corporations).

- **What is an appropriate model for allocating capital funding to Service Managers?** Following the announcement of social housing devolution (Bill 128, the Social Housing Reform Act received Royal Assent in December 2000) the Province needed to finalize its plan for distributing Federal capital funds for public housing to Service Managers. From 1998 onwards, Federal allocations represented about 52% of the approximately $100 million capital investments made to Ontario's public housing stock each year, with the balance funded directly by Ontario's Service Managers. KPMG was asked to assist in developing a model that allocated $500 million over the 2001-2005 period (i.e., $100 million annually over five years) to municipal Service Managers. The Province could then use this model as a tool to allocate Federal funding. It is noted that Local Housing Corporation capital budgets for the year 2001 have already been approved in September 2000. These amounts are used for year 1 of the 5-year horizon.

This report presents the results of these follow-up investigations.

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[1] *Service Managers are the 47 municipal organizations that now own and administer the public housing portfolio in their jurisdictions.*

Approach

In this assignment the following tasks were completed:

- Interview MMAH staff who were familiar with the process of public housing capital funding;
- Assemble a database of Portfolio Characteristics (i.e., relevant information on the public housing portfolio in each Service Manager's jurisdiction such as number of units, unit types, client characteristics, and location);
- Collect information on the 2001-2005 capital funding requests that were prepared in 2000 by Local Housing Authorities (now Local Housing Corporations);
- Review the results of building condition assessments that have been prepared for the Ministry by independent engineering companies;
- Assist the Ministry to articulate a preferred set of funding model objectives;
- Define a series of funding model options;
- Assess the advantages and disadvantages of different capital funding allocation models;
- Identify an appropriate model that meets the capital funding allocation objectives.

During this assignment regular meetings were held with Ministry staff to review progress, confirm understanding of the Ministry's funding model objectives, assess the advantages and disadvantages of various funding approaches, and discuss refinements to the capital funding allocation model.

KPMG's work did not include the validation of the underlying data provided. Such data includes the number of units in each portfolio, the 2001-2005 capital funding requests, and the building condition assessments.

The reason for different funding levels

The first task was to investigate reasons for the difference in historic funding levels among different Service Managers. The average annual Ontario expenditure is approximately $1,180 per unit[2]; however there are a number of portfolios that have received a long term average investment of under $700 per unit per year, and there are others that have received over $1,500 per unit per year.

A review of historic expenditure patterns, capital funding requests for the public housing portfolio prepared by Local Housing Corporations (LHCs), and independent engineering assessments revealed that historical funding levels were related to the needs of differing housing portfolios. The need for capital funding varies across Service Manager, reflecting differences in portfolio characteristics, such as:

- Age of buildings (some service manager portfolios have older buildings, others have newer buildings)
- Type of buildings (some service managers have almost all apartment buildings whereas others have none)
- Client profiles (some service manager portfolios have almost all families, others have almost all seniors)
- Geographic location (some service manager portfolios are located in more remote areas with tougher climates)
- Size of portfolio (service manager portfolios range from under 250 units to over 29,000 units)
- Wear and tear on the buildings (some service managers experience a greater degree of wear and tear on buildings)
- Many other factors

Analysis of the available data indicated that these characteristics are key cost drivers for capital funding requirements. As a result, it would be inappropriate to provide an equal funding level for all Service Managers because low cost portfolios would get too much (relative to their need) and legitimately high cost portfolios would get too little (relative to their need).

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[2] *$100 million annual average divided by 84,411 units*

This finding had important implications for the development of a capital funding allocation model (part two of KPMG's scope). The allocation model should vary the level of funding provided to Service Managers based on the relative need for funding, recognizing that Service Manager portfolios differ greatly and, therefore, have different funding requirements.

Objectives for a Capital Funding Allocation Model

An important step during this project was to clearly articulate the desired features of an "ideal" capital funding allocation model. A set of funding model objectives was identified:

- The model should allocate funds on the basis of relative need for funding, recognizing that Service Manager portfolios differ greatly and, therefore, have different funding requirements.
- The allocation model should ensure adequate funding to maintain the physical condition of public housing units.
- The model should apply the same set of funding rules for all Service Managers (thus minimizing subjective judgments) to ensure consistent treatment.
- The model should provide for a minimum level of funding so that funding allocations do not fall short of reasonable industry norms.
- The model should include a mechanism to prioritize capital projects, separating essentials from enhancements.
- The model should provide adequate funding to pay for all high priority (i.e., structural, life safety and legislative) capital projects that have been identified in the 2001-2005 capital funding requests prepared by Local Housing Authorities.
- The model should provide a stable and predictable level of funding in each year in order to allow Service Managers to plan for multi-year capital planning horizons.
- The model should avoid the requirement for an annual provincial review/approval of federal funding allocations. However, the model should allow for review/updates at reasonable intervals.

- The model should set a defined funding level for each Service Manager with the onus on Service Managers to effectively maintain the public housing stock within this funding envelope. This places decision-making accountability in the hands of Service Managers (i.e., those who are responsible for funding capital repairs) and encourages fiscally responsible investments that focus on prolonging asset life – a key factor that will reduce the long term need for public housing capital funding.

No capital funding allocation model can perfectly address all of these sometimes competing objectives. The challenge of this project was to develop a model that addresses all objectives, applies a consistent set of rules for all Service Managers, and establishes a balance where tradeoffs are required.

Proposed Funding Model

During the course of this project many different capital funding allocation models were investigated. Cost driver models, regression models, average funding level models, capital plan-based models and numerous other blends and variations were tested and evaluated. Many models were ruled out because they failed to adequately address some or all of the objectives.

Based on an extensive and iterative process of criteria-based evaluation, a proposed model was developed that addressed all of the objectives. This model represents a blend of many approaches and is described in the following 5 steps:

1. **Start with 5 year capital funding requests** – Five-year capital funding requests (2001-2005) were prepared by Local Housing Authorities in 2000. Independent building assessments have confirmed that capital funding needs are generally accurately portrayed in the 5-year capital funding requests. Some variances exist between LHA and independent building assessments concerning the timing of more discretionary repairs (building enhancements, planned maintenance, efficiency upgrades). Based this information, the 5-year funding requests for 47 Service Managers were used as the primary input for the proposed funding model over the 2001-2005 period.

2. **Adjust capital funding requests using results from independent building condition assessments.** Although the capital plans were found to be generally sound, independent building assessments suggested that adjustments to the capital requests would be appropriate. Accordingly, funding request amounts were reduced for "low cost" portfolios (i.e., those that have a disproportionate share of seniors, grade related, newer buildings) and increased for "high cost" portfolios (i.e., those that have a disproportionate share of families, high rise, older buildings). These adjustments were based on the unique characteristics of

each Service Manager's public housing portfolio. In most cases (37 out of 47), the adjusted amounts are within 20% of the requested amounts.

3. **Budget for $100 million annually and allocate to Service Managers on the basis of funding priority.** This step is conducted in two parts.

   - All structural, life safety and legislative projects that have been identified in the 5-year funding requests are fully funded over the five years. These high priority projects represent about 15% of the total capital funding requests.

   - The remainder of $100 million annually (about $85m) is allocated across Service Managers based on pro-rata share of aggregate (all Service Managers) adjusted requests for lower priority building upgrades and enhancement.

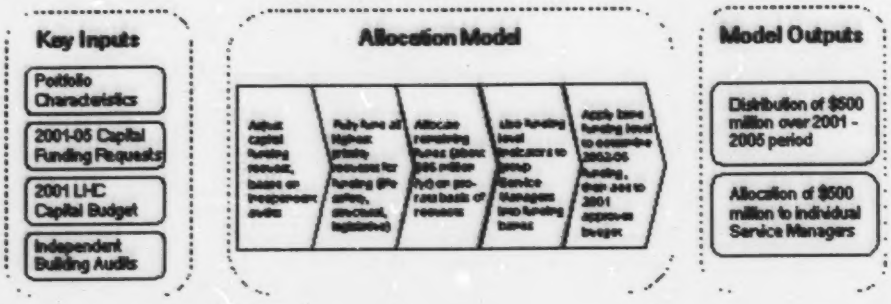
   This process calculates a funding indicator for each of the 47 Service Managers.

4. **Group the Service Managers into standard funding bands.** This step categorizes Service Managers with similar levels of per unit funding requirements into funding bands. Within a funding band, the same level of per unit funding is provided to each Service Manager, thus avoiding the need to rationalize small differences. A base minimum funding level ($800/unit) is established to ensure that Service Managers are provided funding even if the 2001-2005 capital funding request inadvertently omitted some required upgrades. The table below indicates the bands that have been used.

Funding Band	Characteristics of Housing Portfolio
$800/unit/year	Service Managers with very low cost portfolios (e.g., high proportion of newer buildings, seniors, grade related buildings). Any Service Manager with a funding indicator (model Step 3) of less than $800/unit was rounded up to this level.
$950/unit/year	Service Managers with somewhat low cost portfolios (e.g., fewer newer buildings, fewer seniors, some high rise buildings). Any Service Manager with a funding indicator (model Step 3) of $800-$950/unit was rounded up to this level.
$1100/unit/year	Service Managers with modest cost portfolios (e.g., more older buildings, more families, more high rise buildings). Any Service Manager with a funding indicator (model Step 3) of $950-$1100/unit was rounded up to this level.
$1250/unit/year	Service Managers with higher cost portfolios (e.g., many older buildings, families and high rise buildings). Any Service Manager with a funding indicator (model Step 3) of $1100-$1250/unit was rounded up to this level.
$1400/unit/year	Service Managers with very high cost portfolios (e.g., mostly older buildings, mostly families, mostly high rise buildings). Any Service Manager with a funding indicator that exceeded $1250/unit was grouped into this band. In a few cases, where capital funding requests are extremely high, this process resulted in a rounding-down. This process of removing the extreme outliers was supported by independent engineering investigations.
$1581/unit/year	Toronto – Due to the extreme concentration of highest cost units (high rises, families, oldest buildings, urban inner city) a separate funding category is established for this Service Manager. This higher funding level was determined based on the capital funding request, engineering assessments and funding availability.

5. **Develop model for 2001-2005.** Local Housing Corporation capital budgets for 2001 calendar year have already been approved in September 2000 by the Ontario Housing Corporation. These amounts are assumed for year 1 of the 5-year horizon. Funding bands from the previous step are used to set funding levels for years 2002 to 2005. The resulting five-year total funding levels reflect impact of both the 2001 allocation based on peer reviewed LHC budgets, plus four subsequent year allocations based on funding bands.

An illustration of the allocation model is presented below:


Key Inputs
Portfolio Characteristics
2001-05 Capital Funding Requests
2001 LHC Capital Budget
Independent Building Audits
Allocation Model
Model Outputs
Distribution of $500 million over 2001 - 2005 period
Allocation of $500 million to individual Service Managers

Model Results

The results of the model are presented on the following pages:

- Table 1 – Funding band assignment.
- Table 2 – Five year (2001-2005) capital funding levels.

Funding Band Assignment

Service Manager	Number of Units	Funding Band $/unit/year
Algoma	264	$1,100
Brantford	874	$800
Bruce	398	$800
Chatham-Kent	598	$800
Cochrane	1,292	$1,400
Cornwall	1,008	$950
Dufferin	225	$1,400
Durham	1,276	$1,100
Grey	888	$950
Halton	1,407	$800
Hamilton	5,134	$1,100
Hastings	1,115	$800
Huron	415	$800
Kawartha Lakes	467	$1,400
Kenora	528	$800
Kingston	977	$1,100
Lambton	771	$800
Lanark	484	$950
Leeds & Grenville	667	$1,250
Lennox & Addington	375	$800
London	3,262	$800
Manitoulin	261	$800
Muskoka	222	$800
Niagara	2,636	$800
Nipissing	574	$1,400
Norfolk	391	$1,400
Northumberland	338	$800
Ottawa	8,610	$800
Oxford	636	$800
Parry Sound	209	$1,400
Peel	1,016	$1,400
Peterborough	813	$800
Prescott & Russell	311	$800
Rainy River	301	$800
Renfrew	921	$800
Sault Ste. Marie	755	$1,100
Simcoe	1,157	$1,100
St. Thomas	512	$800
Stratford	663	$800
Sudbury	1,848	$1,250
Thunder Bay	1,586	$800
Timiskaming	492	$1,100
Toronto	29,560	$1,581
Waterloo	2,557	$1,400
Wellington	1,189	$1,400
Windsor	3,516	$800
York	872	$950
ONTARIO	84,411	

Five Year Capital Funding Levels

Service Manager	2001-05 Total Funding	2001-05 Avg. Funding $/unit/year
Algoma	$1,380,800	$1,182.42
Brantford	$3,394,200	$776.70
Brice	$1,428,500	$717.84
Chatham-Kent	$2,131,000	$712.71
Cochrane	$3,185,400	$1,422.04
Cornwall	$5,198,300	$1,081.41
Dufferin	$1,605,200	$1,426.84
Durham	$7,194,100	$1,118.20
Grey	$4,185,500	$889.49
Haldimand	$3,809,400	$857.93
Hamilton	$25,888,000	$1,047.64
Hastings	$4,657,900	$871.37
Huron	$1,883,100	$767.04
Kawartha Lakes	$3,581,100	$1,583.66
Kenora	$1,998,100	$756.66
Kingston	$5,085,900	$1,245.83
Lambton	$2,015,800	$762.57
Lanark	$2,281,100	$942.60
Leeds & Grenville	$3,938,800	$1,177.90
Lennox & Addington	$1,385,500	$744.80
London	$12,427,500	$757.31
Manitoulin	$1,158,400	$852.95
Muskoka	$880,200	$985.05
Niagara	$8,830,900	$745.90
Nipissing	$3,780,200	$1,317.14
Norfolk	$2,709,900	$1,388.07
Northumberland	$1,385,500	$825.74
Ottawa	$33,127,700	$788.52
Oxford	$2,440,100	$767.33
Parry Sound	$1,882,400	$1,382.11
Peel	$7,251,300	$1,427.42
Peterborough	$3,388,000	$821.16
Prescott & Russell	$1,405,800	$809.92
Prince Edward	$1,131,800	$751.89
Renfrew	$3,557,100	$774.61
Sault Ste. Marie	$4,286,800	$1,122.33
Simcoe	$6,297,400	$1,098.57
St. Thomas	$2,056,300	$809.24
Stratford	$2,594,600	$779.67
Sudbury	$4,738,700	$1,270.42
Thunder Bay	$5,988,400	$736.54
Timiskaming	$2,765,300	$1,124.11
Toronto	$237,073,300	$1,604.01
Waterloo	$16,738,800	$1,309.25
Wellington	$7,940,300	$1,318.81
Windsor	$13,788,200	$784.37
York	$14,482,800	$1,009.84
ONTARIO	$600,000,000	

Assessment of Proposed Funding Model

The model addresses the objectives that have been articulated during the initial stages of this project. An assessment of the proposed model based on the pre-established objectives is provided below:

Model Objectives	*Model Assessment*
Allocate funds on the basis of relative need for funding, recognizing that Service Managers have different funding requirements.	Using locally generated capital plans as key input ensures that the model allocates funding on the basis of the need identified in 5-year capital plans (e.g., high cost portfolios are allocated more funding and low cost portfolios receive less funding). This ensures that funding allocations are based on documented need rather than arbitrary averages.
Provide adequate funding to maintain the physical condition of public housing units.	Model fully allocates $100 million annually, an amount that is considered adequate over the 2001-2005 timeframe. All high priority capital funding projects (e.g., life safety, structural, legislative) are fully funded in all Service Managers. This is an important criterion to ensure that the public housing portfolio is maintained in good condition.
Apply the same set of funding rules for all Service Managers (thus minimizing subjective judgments) to ensure consistent treatment.	Consistent rules and standard calculations are applied to all Service Managers. Standard bands were used to avoid excessively high or excessively low funding levels.
The model should provide for a minimum level of funding so that funding allocations do not fall short of reasonable industry norms.	The minimum funding band of $800/unit annually was set to ensure that potential deviations from historic averages or capital funding requests do not result in a level of funding that is below industry norms.
Prioritize to capital funding projects, separating essentials from enhancements.	The model separates projects according to priority. Five categories of priority were used: life safety, structural, legislative, building functionality and efficiency.
Provide adequate funding to pay for all high priority (i.e., structural, life safety and legislative) capital projects.	The model provides adequate funding to ensure that all high-priority investments identified over the 2001-2005 period are fully funded.
Provide a stable and predictable level of funding in each year in order to allow Service Managers to plan for multi-year capital planning horizons.	The model sets a stable funding amount over a five year planning horizon, thus allowing Service Managers flexibility to effectively manage the annual variations in their capital investment program within this timeframe.
Avoid an annual provincial review/approval of federal funding allocations, while allowing review/updates at reasonable intervals.	The model complies with this objective.
The model should set a defined funding level for each Service Manager with the onus on Service Managers to effectively maintain the public housing stock within this funding envelope.	The model sets a defined level for each Service Manager over the 5-year period, allowing Service Managers to effectively maintain the public housing stock within the funding envelope.

Conclusion

The proposed capital funding allocation model was developed to reflect the diversity across Ontario's Service Managers. There will always be tradeoffs among competing objectives and funding priorities in any given funding allocation model. KPMG is confident that the proposed model adequately addresses and balances the Ministry's objectives.